CLAIM AMENDMENTS

1. (Currently Amended) A circuit board comprising:

a substrate; and

electrical contacts to releasably mate with contact springs of a slot connector in response to the substrate being inserted into a slot of the slot connector, the contacts comprising a first set of at least three uniformly spaced contacts to communicate power and a second set of at least three uniformly spaced contacts to communicate signals and not to communicate power, adjacent contacts of the first set being separated by a first distance and adjacent contacts of the second set being separated by a second distance different from the first distance,

wherein no intervening contact exists between any two adjacent contacts of the first set.

2. (Previously Presented) The circuit board of claim 1, wherein the first distance is approximately half of the second distance.

3. (Original) The circuit board of claim 1, wherein the substrate comprises an edge to be inserted into a slot connector housing, and the first and second set of contacts are formed on the edge.

4. (Previously Presented) The circuit board of claim 1, wherein the first distance establishes a pitch of approximately 0.05 inches and the second distance establishes a pitch of approximately 0.10 inches.

5. (Previously Presented) The circuit board of claim 1, further comprising:

power regulation circuitry mounted on the substrate and in electrical communication with the first set of contacts to regulate voltages provided by the first set of contacts and not regulate any voltages provided by the second set of contacts.

6. (Currently Amended) A circuit board comprising:

circuitry; and

a substrate supporting the circuitry and having a contact edge to be inserted into a slot of a slot connector housing assembly, the substrate having an edge profile engaged by the connector housing assembly inside the slot in response to the substrate being inserted into the slot to resist removal of the circuit board from the slot connector housing assembly.

7. (Cancelled)

8. (Previously Presented) The circuit board of claim 6, wherein the mechanism comprises at least one of a spring located entirely inside the slot and a plastic latch internal to the slot.

9. (Previously Presented) The circuit board of claim 6, wherein the profile comprises a notch formed in a straight edge of the substrate, the straight edge being different from the contact edge and being inserted into the slot to position the edge profile to engage the connector housing assembly.

10. (Previously Presented) The circuit board of claim 9, wherein the straight edge extends in an orthogonal direction to the contact.

11. (Currently Amended) A method comprising:

supporting circuitry on a substrate to form a circuit board, the circuit board having a contact edge comprising electrical contacts; and

forming an edge profile in the substrate to engage a slot connector housing assembly inside a slot of the slot connector housing assembly in response to the substrate being inserted into the slot to resist removal of the circuit board from the slot connector housing assembly, the slot adapted to receive the contact edge.

12. (Previously Presented) The method of claim 11, further comprising:

engaging the profile with a mechanism located inside the slot.

13. (Previously Presented) The method of claim 12, wherein the mechanism comprises a spring located entirely inside the slot.

14. (Previously Presented) The method of claim 11, further comprising:

forming the profile on a second edge of the substrate, the second edge extending in a direction substantially orthogonal to a direction along which the contact edge extends.

15. (Original) A connector comprising:

a housing including a slot to receive a circuit board, the housing being formed from a material having a thermal conductivity of at least approximately 0.27 W/m·K; and

electrical contacts secured to the housing to establish electrical communication with electrical contact pads of the circuit board.

16. (Original) The connector of claim 15, wherein the material comprises a liquid crystal polymer.

17. (Original) The connector of claim 15, wherein the housing comprises fins to promote conduction of heat away from the circuit board when the circuit board is inserted into the slot.

18. (Original) A method comprising:

using a material having a thermal conductivity of at least approximately 0.27 W/m·K to form a housing for a slot connector, the housing having a slot to receive a circuit board; and

using the thermal conductivity of the material to conduct heat away from circuitry of the circuit board.

19. (Original) The method of claim 18, wherein the material comprises a liquid crystal polymer.

20. (Original) The method of claim 18, further comprising:

forming fins in the housing to conduct heat away from the circuit board when the circuit board is inserted into the slot.

21. (Original) A method comprising:

providing a slot connector to receive a circuit board; and

forming fins on the slot connector to conduct heat away from circuitry of the circuit board.

22. (Original) The method of claim 21, wherein the slot connector couples the circuit board to another circuit board, the method further comprising:

providing an edge of the slot connector to mount to said another circuit board; and

creating clearances between each fin and the edge.

23. (Original) The method of claim 22, wherein each of the clearances is in a range between approximately 1/4 inches and approximately 3/8 inches.

24. (Original) The method of claim 22, further comprising:

forming the fins out of a liquid crystal polymer.

25. (Currently Amended) A slot connector comprising:

electrical contacts to establish electrical communication with electrical contacts of a circuit board;

a housing comprising a slot to receive the electrical contacts; and

a retention mechanism to engage an edge profile of the circuit board inside the slot to secure the circuit board to the slot connector in response to the substrate being inserted into the slot.

26. (Original) The slot connector of claim 25, wherein the retention mechanism is located entirely inside the slot.

27. (Original) The slot connector of claim 25, wherein the retention mechanism comprises a spring.

28. (Currently Amended) A method comprising:

using a housing to form a slot to receive electrical contacts of a circuit board;

attaching a retention mechanism to the housing to engage an edge profile of the circuit board inside the slot to secure the circuit board to the housing in response to the substrate being inserted into the slot.

29. (Original) The slot connector of claim 28, further comprising:

disposing the retention mechanism entirely inside the slot.

30. (Original) The slot connector of claim 28, wherein the retention mechanism comprises at least one of a spring and a plastic latch.

31.-34. (Cancelled)

35. (Currently Amended) A method comprising:

supporting circuitry on a substrate to form a circuit board;

forming an electrical contact edge on the substrate, the electrical contact edge to be inserted into a slot of a slot connector housing assembly; and

forming an edge profile in the substrate to engage the slot connector housing assembly inside the slot in response to the substrate being inserted into the slot to resist removal of the circuit board from the slot connector housing assembly, wherein the profile comprises a notch formed in another edge of the substrate.

36. (Previously Presented) The method of claim 35, further comprising:

engaging the profile with a mechanism located at least partially inside the slot.

37. (Previously Presented) The method of claim 35, wherein the mechanism comprises a spring located entirely inside the slot.

38. (Cancelled)

39. (Previously Presented) An apparatus comprising:

a housing to form a slot to receive a circuit board; and

fins thermally coupled to the housing to conduct heat away from circuitry of the circuit board.

40. (Previously Presented) The apparatus of claim 39, wherein the fins are formed out of a liquid crystal polymer.

41. (Previously Presented) The apparatus of claim 39, further comprising:

a retention mechanism located at least partially inside the housing to engage the circuit board to resist removal of the circuit board from a housing.

42. (New) The circuit board of claim 1, wherein the contact springs comprise leaf springs.

43. (New) The circuit board of claim 42, wherein bowed portions of the leaf springs contact the circuit board.

44. (New) The circuit board of claim 6, wherein the circuit board is inserted in a first direction into the slot and the edge profile engages the connector housing assembly without substantial movement of the circuit board in a second direction orthogonal to the first direction.

45. (New) The method of claim 11, wherein the circuit board is inserted in a first direction into the slot and the edge profile engages the connector housing assembly without substantial movement of the circuit board in a second direction orthogonal to the first direction.

46. (New) The slot connector of claim 25, wherein the circuit board is inserted in a first direction into the slot and the edge profile engages the retention mechanism without substantial movement of the circuit board in a second direction orthogonal to the first direction.

47. (New) The method of claim 28, wherein the circuit board is inserted in a first direction into the slot and the edge profile engages the retention mechanism without substantial movement of the circuit board in a second direction orthogonal to the first direction.

48. (New) The method of claim 35, wherein the circuit board is inserted in a first direction into the slot and the edge profile engages the connector housing assembly without substantial movement of the circuit board in a second direction orthogonal to the first direction.